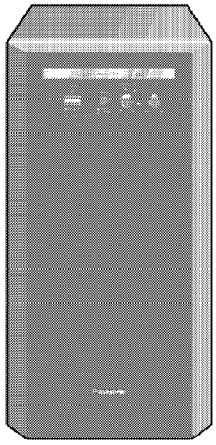
ORDER NO. MAES020237C8

Service Manual

Active Subwoofer



SB-WA110EB
SB-WA110EG
SB-WA110GC
SB-WA110GN

Colour

(K).....Black Type (EB, EG Areas)

(S).....Silver Type (EB, EG, GC, GN Areas)

Specifications

nSPEAKER SECTION

Type:	1 way 2 speaker system Bass-reflex type
Speaker:	
Woofer;	17cm cone type × 2
Impedance:	4Ω
Input power:	
Music;	200W
DIN;	100W
Sound pressure level:	82dB/W (1.0m)
Frequency range (with amp):	38-410Hz (at-16dB) 41-320Hz (at-10dB)

nAMPLIFIER SECTION

Output power:	100W (4Ω) (THD 1%)
Input sensitivity / Input Impedance:	70mV / 33kΩ (RCA jack)
Phase switching:	NORMAL/REVERSE
Low pass filter:	50-200 Hz Variable

nGENERAL

Power supply:	AC 230V/240V,50/60Hz
Power consumption:	65W
Dimensions (W × H × D):	221 × 453 × 407mm
Mass:	11.5 kg

Notes:

Specifications are subject to change without notice.

Mass and dimensions are approximate.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Panasonic

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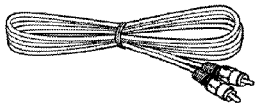
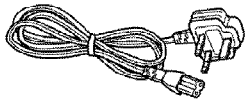
11 Packaging 21

1 Accessories

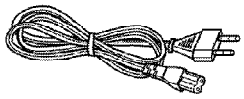
- Monaural connection cable (RJL1P015B50)..... 1pc.



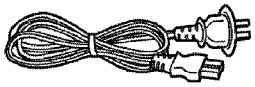
- AC mains lead for EB area (RJA0044-3C)..... 1pc.



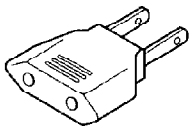
- AC mains lead for EG,GC areas (RJA0043-1C)..... 1pc.



- AC mains lead for GN area (RJA0035-C)..... 1pc.



- Power plug adaptor for GC area (SJP5213-2)..... 1pc.



2 Caution for AC Main Lead

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ⓐ or the BSI mark ♆ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:
Blue: Neutral, Brown: Live.
As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF - KEEP DRY.

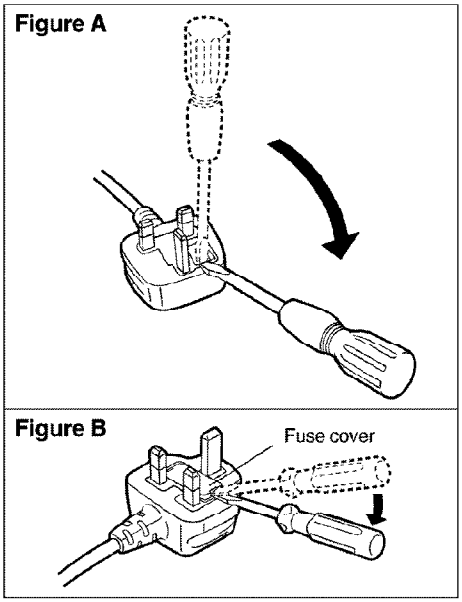
Before use

Remove the connector cover.

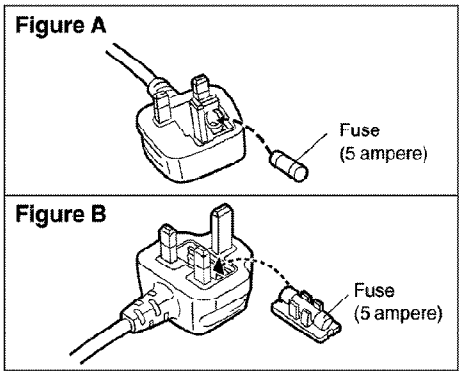
How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



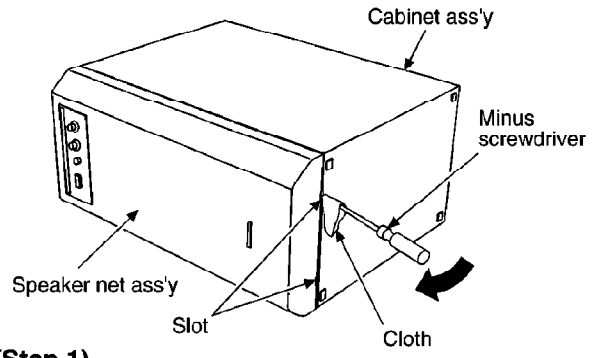
2. Replace the fuse and close or attach the fuse cover.



3 Operation Checks and Component Replacement Procedures

- **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
- **For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.**

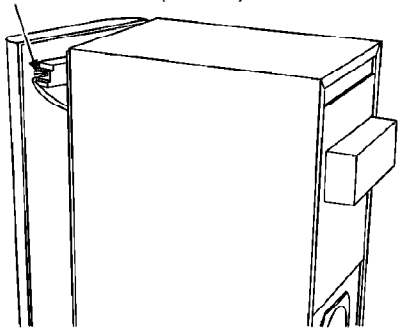
3.1. Checking for the control P.C.B.



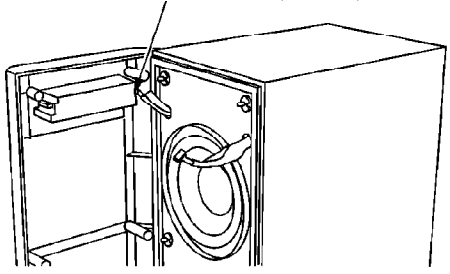
(Step 1)
Insert the minus screwdriver to the slot of basement, and then separate the speaker net ass'y from the unit.

NOTE:
To avoid the damage to the cabinet ass'y or speaker net ass'y, cover the minus screwdriver with cloth.

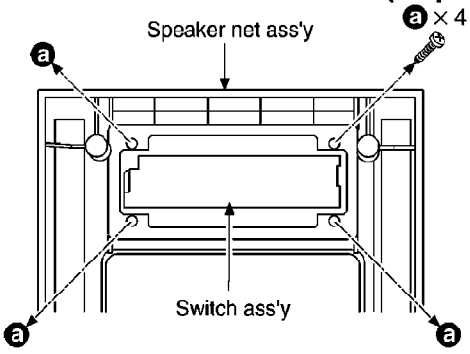
(Step 2)
Remove the connector (CP503).



(Step 3)
Remove the connector (CP851).



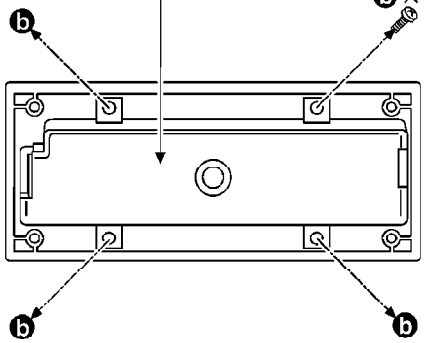
(Step 4)
ⓐ × 4



(Step 5)
Remove the switch ass'y from the speaker net ass'y.

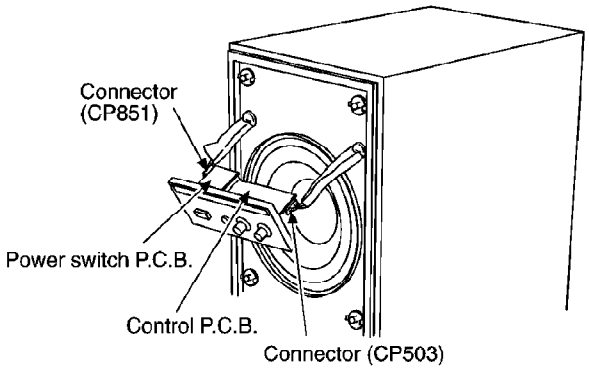
(Step 7)
Remove the mold front case.

(Step 6)
ⓑ × 4



- **Check the control P.C.B. as shown below.**

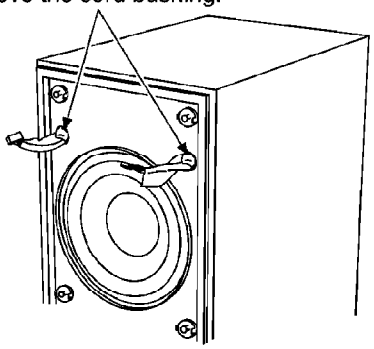
(Step 8)
Connect the 2 connectors.



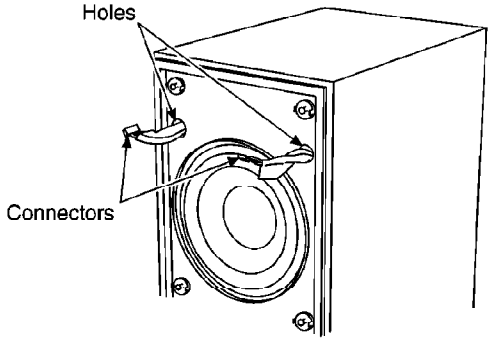
3.2. Checking for the input AMP P.C.B. and main P.C.B.

• Follow the **(Step 1)** - **(Step 3)** of item 3.1.

(Step 1)
Remove the cord bushing.

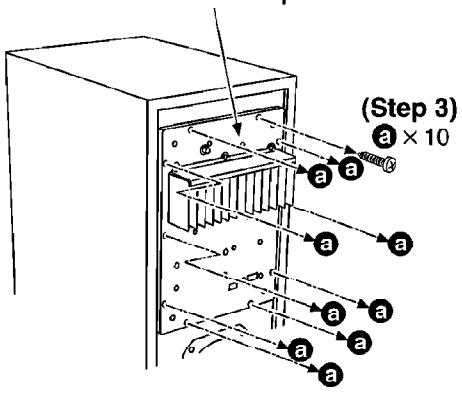


(Step 2)
Put in the connectors to the hole.

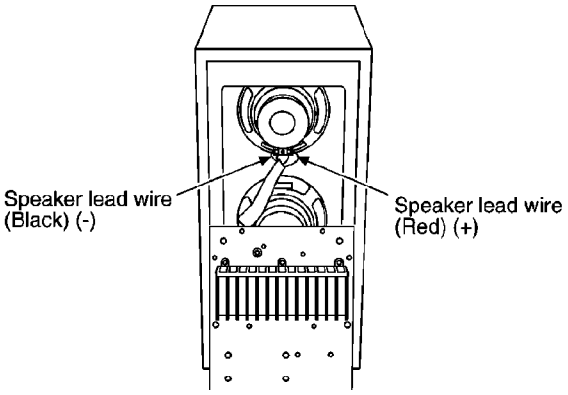


(Step 4)
Pull out the rear panel.

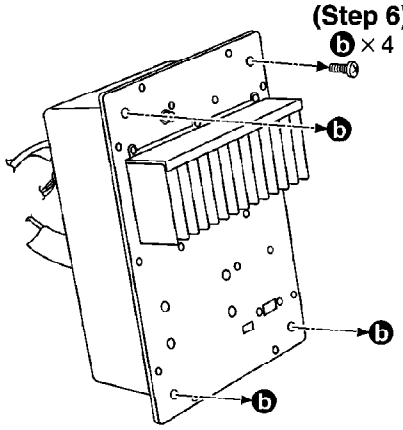
(Step 3)
ⓐ × 10



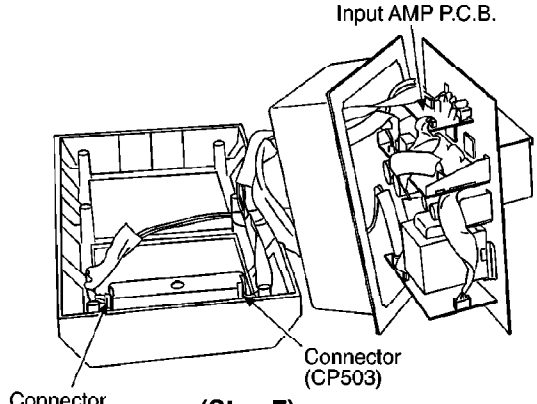
(Step 5)
Remove the speaker lead wires.



(Step 6)
ⓑ × 4

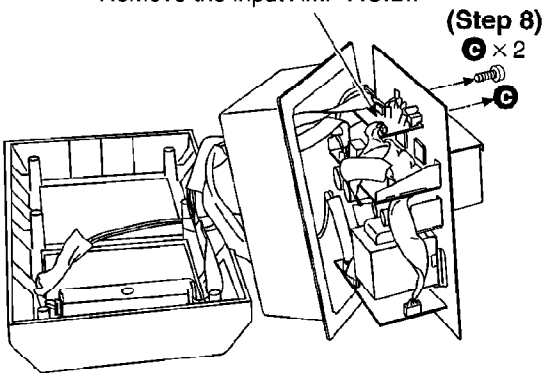


• **Check the input AMP P.C.B. as shown below.**

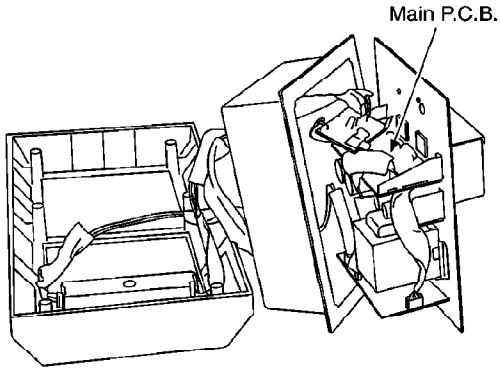


(Step 7)
Connect the 2 connectors.

(Step 9)
Remove the input AMP P.C.B..



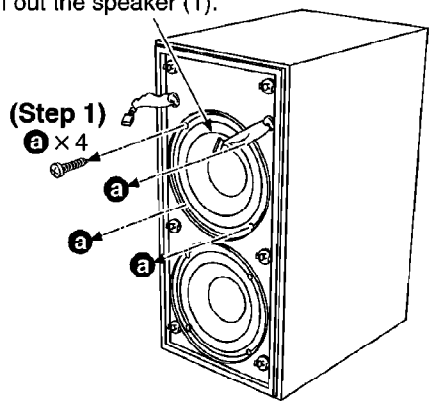
- **Check the main P.C.B. as shown below.**



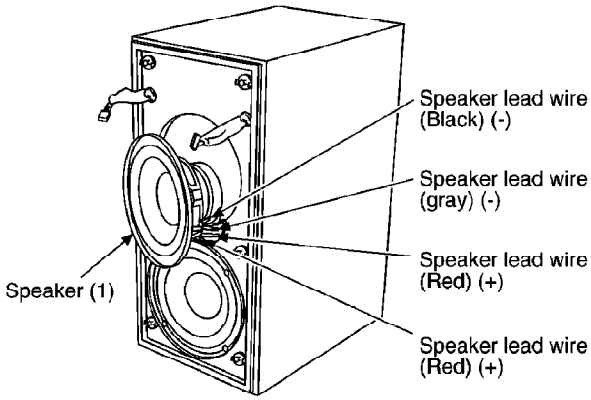
3.3. Replacement for the speaker (1)

- Follow the **(Step 1)** - **(Step 3)** of item 3.1.

(Step 2)
Pull out the speaker (1).



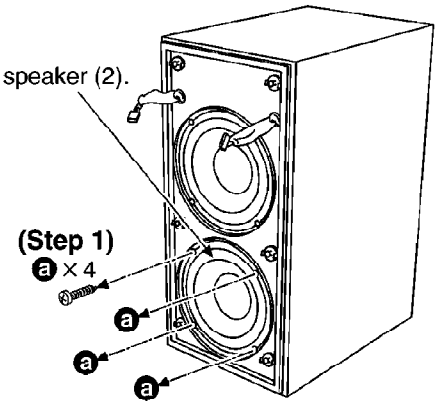
(Step 3)
Remove the speaker lead wires, and then remove the speaker (1).



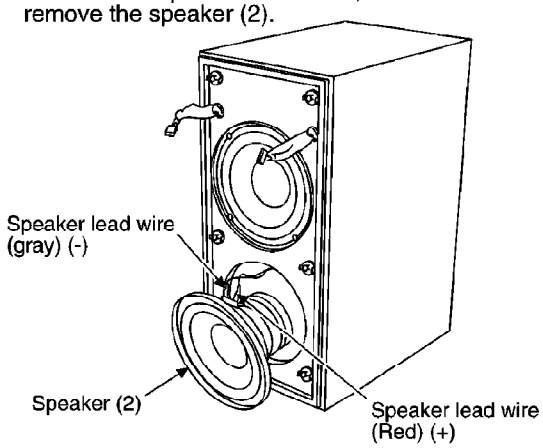
3.4. Replacement for the speaker (2)

- Follow the **(Step 1)** - **(Step 3)** of item 3.1.

(Step 2)
Pull out the speaker (2).



(Step 3)
Remove the speaker lead wires, and then remove the speaker (2).



4 Schematic Diagram

4.1. Schematic Diagram Notes

(This schematic diagram may be modified at any time with the development of new technology.)

Notes:

- S501 : PHASE selector switch in "NORMAL" position.
- S851 : POWER switch in "ON" position.
- S852 : VOLTAGE SELECTOR switch in "240V" position.
- VR501 : VOLUME adjustment VR.
- VR502 : LOW PASS FILTER adjustment VR.
- Signal line

  ➔ : POSITIVE VOLTAGE LINE

  ⇢ : NEGATIVE VOLTAGE LINE

  ⇨ : SUB WOOFER SIGNAL LINE

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internalimpedance of the DC circuit tester.
- Important safety notice:

  Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. Whenreplacing any of components, be sure to use only manufacture's specified parts shown in the parts list.

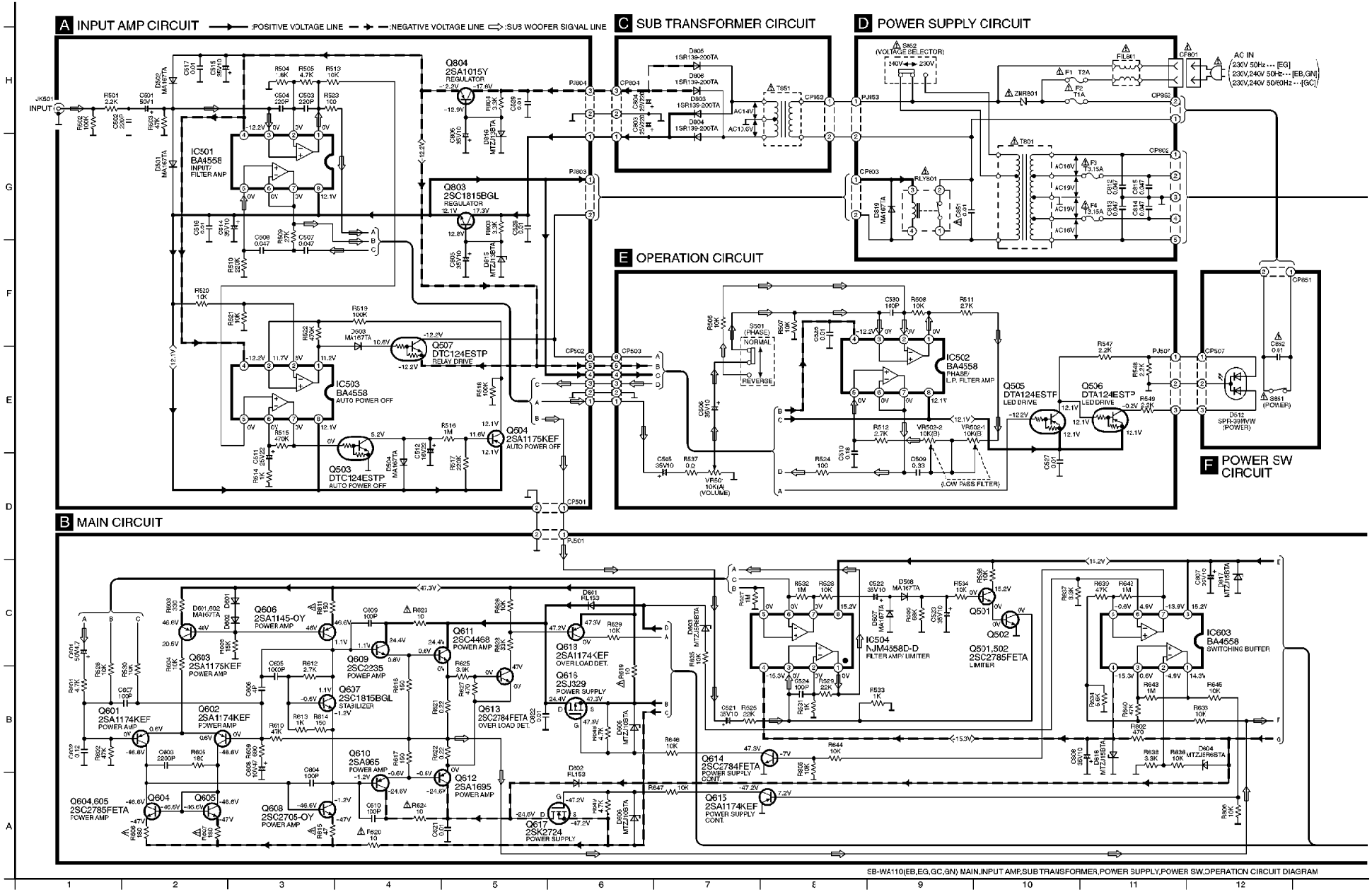
Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

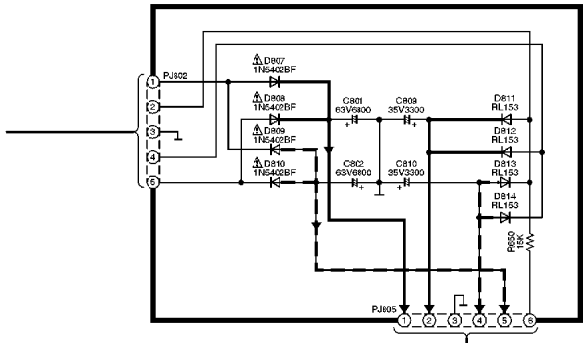
- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the pins of IC or LSI with fingers directly.

4.2. Schematic Diagram

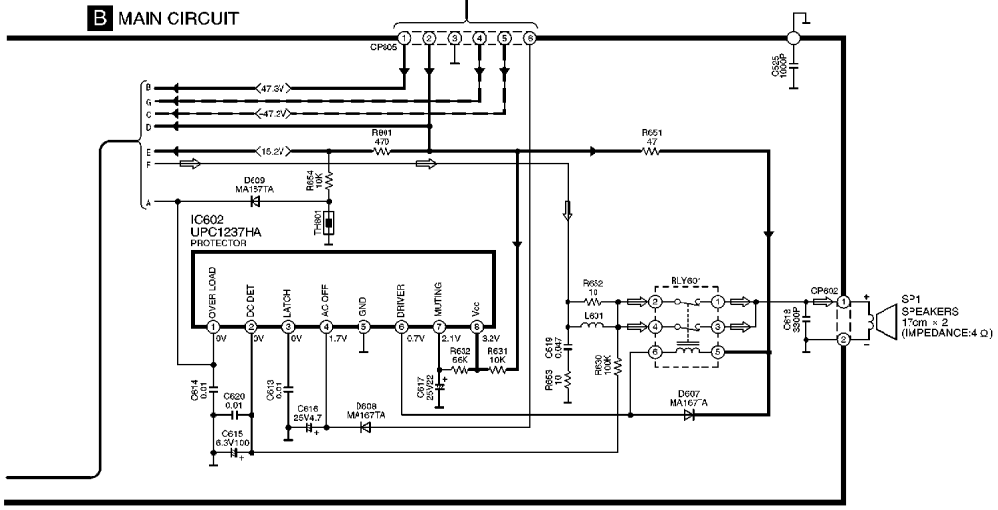

A INPUT AMP CIRCUIT
:POSITIVE VOLTAGE LINE
:NEGATIVE VOLTAGE LINE
:SUB WOOFER SIGNAL LINE
C SUB TRANSFORMER CIRCUIT
D POWER SUPPLY CIRCUIT
E OPERATION CIRCUIT
F POWER SW CIRCUIT
B MAIN CIRCUIT
IC501 BA4558 INPUT/ FILTER AMP
IC502 BA4558 PHASE/ L.P. FILTER AMP
IC503 BA4558 AUTO POWER OFF
IC504 NJM4558D-D FILTER AMP/ LIMITER
IC603 BA4558 SWITCHING BUFFER
Q804 2SA1015Y REGULATOR
Q803 2SC1815BGL REGULATOR
Q507 DTC124ESTP RELAY DRIVE
Q503 DTC124ESTP AUTO POWER OFF
Q504 2SA1175KEF AUTO POWER OFF
Q505 DTA124ESTP LED DRIVE
Q506 DTA124EST? LED DRIVE
Q601 2SA1174KEF POWER AMP
Q602 2SA1174KEF POWER AMP
Q603 2SA1175KEF POWER AMP
Q604,605 2SC2785FETA POWER AMP
Q606 2SA1145-OY POWER AMP
Q607 2SC1815BGL STABILIZER
Q608 2SC2705-OY POWER AMP
Q609 2SC2235 POWER AMP
Q610 2SA965 POWER AMP
Q611 2SC4468 POWER AMP
Q612 2SA1695 POWER AMP
Q613 2SC2784FETA OVER LOAD DET.
Q614 2SC2784FETA POWER SUPPLY CONT.
Q615 2SA1174KEF POWER SUPPLY CONT.
Q616 2SJ329 POWER SUPPLY
Q617 2SK2724 POWER SUPPLY
Q618 2SA1174KEF OVERLOAD DET.
Q501 Q502 Q501,502 2SC2785FETA LIMITER
S862 (VOLTAGE SELECTOR) 240V 230V
AC IN 230V 50Hz ··· [EG] 230V,240V 50Hz ··· [EB,GN] 230V,240V 50/60Hz ··· [GC]
S501 (PHASE) NORMAL REVERSE
VR501 10K(A) (VOLUME)
VR502-2 10K(B)
VR502-1 10K(B)
(LOW PASS FILTER)
D612 SPR-39MVW (POWER)
S851 (POWER)
SB-WA110(EB,EG,GC,GN) MAIN,INPUT AMP,SUB TRANSFORMER,POWER SUPPLY,POWER SW,OPERATION CIRCUIT DIAGRAM

:POSITIVE VOLTAGE LINE :NEGATIVE VOLTAGE LINE :SUB WOOFER SIGNAL LINE

G RECTIFIER DIODE CIRCUIT



B MAIN CIRCUIT

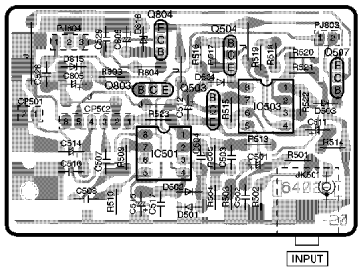


SB-WA110(EB,EG,GC,GN) MAIN,RECTIFIER DIODE CIRCJIT DIAGRAM

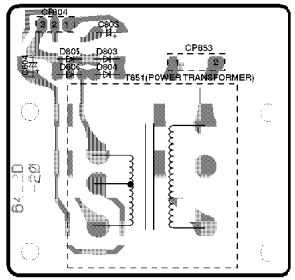
5 Printed Circuit Board Diagram

Note: This printed circuit board diagram may be modified at any time with the development of new technology.

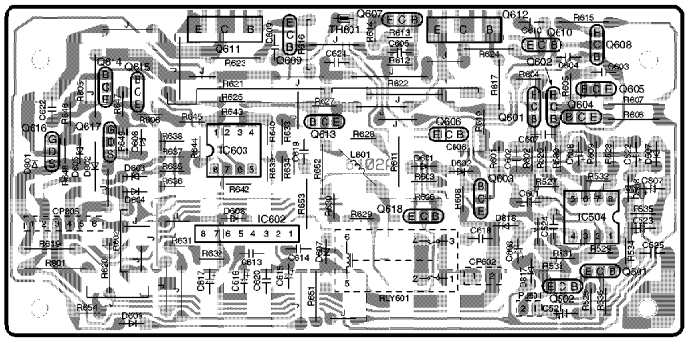
A INPUT AMP P.C.B.



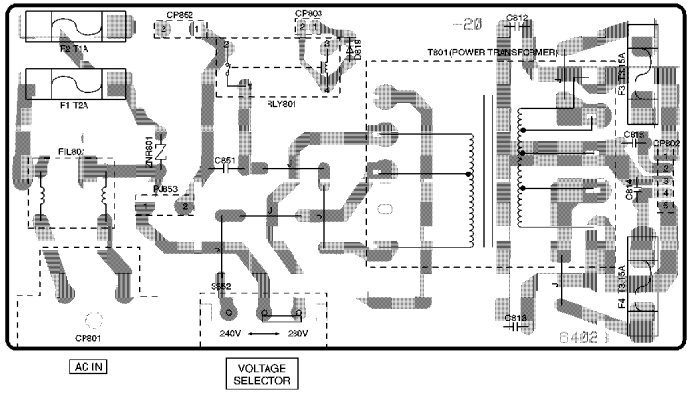
C SUB TRANSFORMER P.C.B.



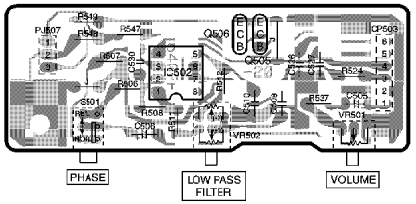
B MAIN P.C.B.



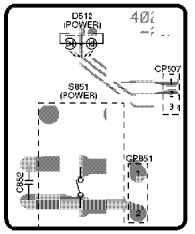
D POWER SUPPLY P.C.B.



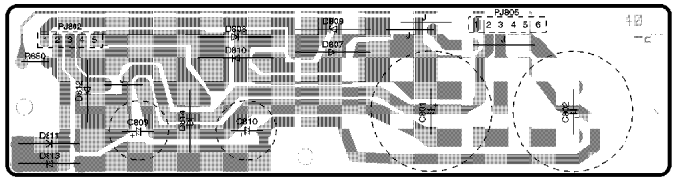
E OPEARTION P.C.B.



F POWER SW P.C.B.

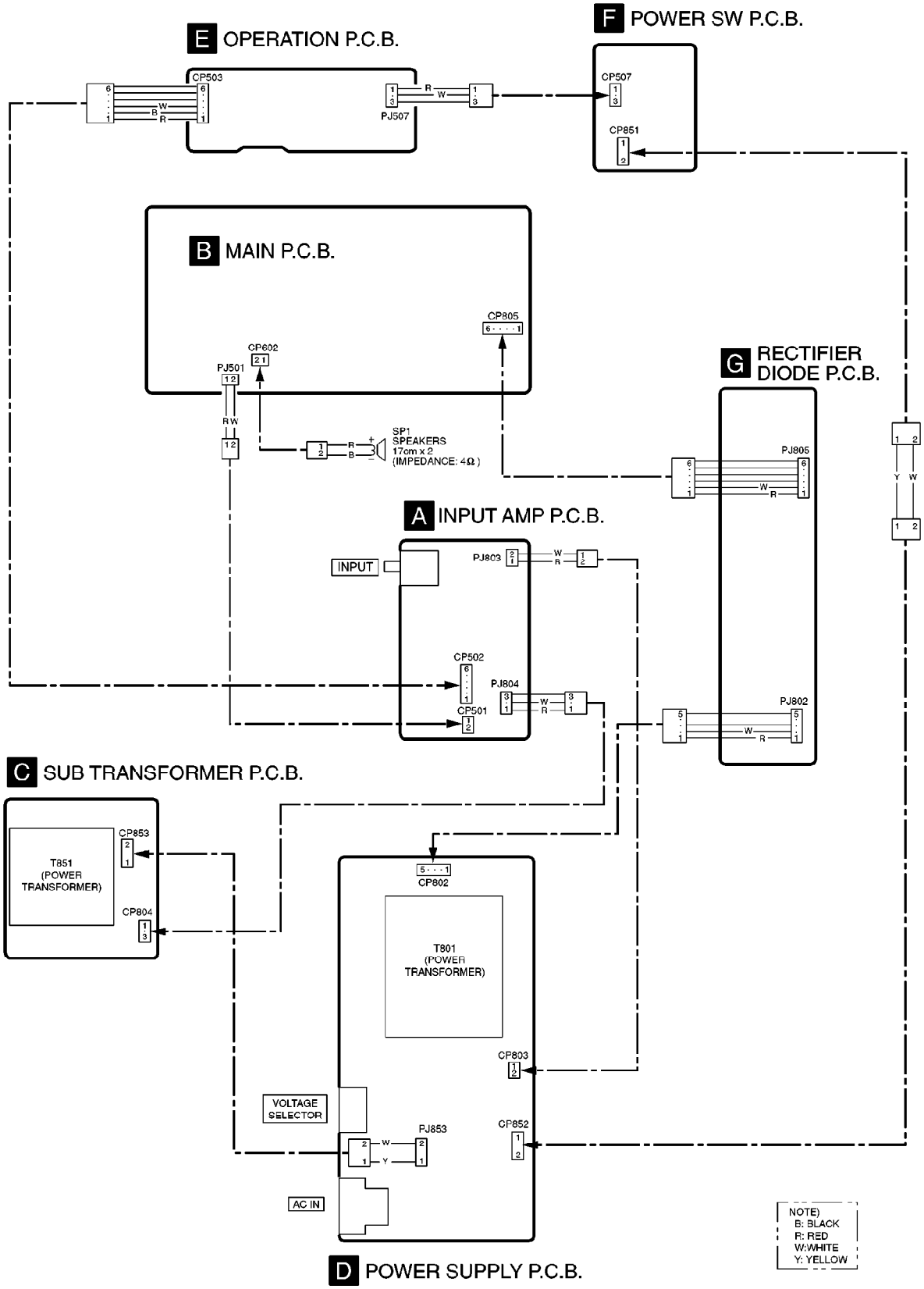


G RECTIFIER DIODE P.C.B.



SB-WA110(E3,EG,GC,GN) INPUT AMP, SUB TRANSFORMER, MAIN, POWER SUPPLY, OPERATION, POWER SW, RECTIFIER DIODE P.C.B.

6 Wiring Connection Diagram



7 Type Illustration of IC's, Transistors and Diodes

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 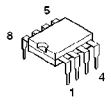 </td>
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 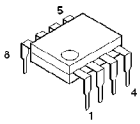 </td>
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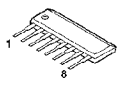
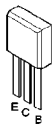
  </td>
<td colspan="2"> 
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 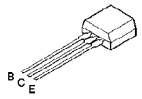 </td>
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 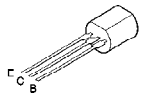 </td>
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 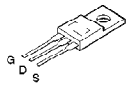 </td>
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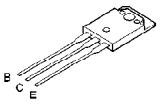
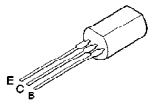
  </td>
<td colspan="2"> 
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 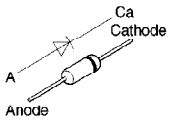 </td>
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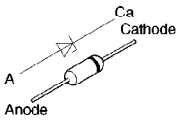
<td colspan="2"> 
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 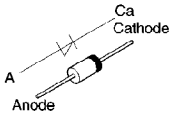 </td>
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 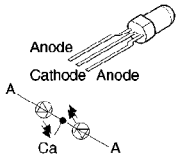 </td>
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</table>

8 Protection Circuitry

This unit incorporates speaker-protection circuits to prevent damage caused by excessive input or abnormal signals.

When excess input is detected, the sound is automatically interrupted.

If sound is interrupted...

1. Reduce the volume level from the receiver or amplifier.
2. Press [POWER] to turn the unit off.
3. Check the sound source and connections for problems.
4. Press [POWER] to turn the unit on.

After the protection circuitry is reset...

Take care not to increase the receiver's or amplifier's volume level too much.

9 Replacement Parts List

Notes:

*Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF), F=Farads (F)
- Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM), 1M=1,000k(OHM)
- [MAES] indicates in Remarks columns parts that are supplied by MAES.
- The "<IA>, <IB>, <IC>" marks in Remarks indicate language of instruction manual.
  <IA> : English
  <IB> : English, Spanish, French,Swedish, German, Italian, Netherlands, Danish, Czech, Russian, Polish
  <IC> : English, Chinese, Arabic

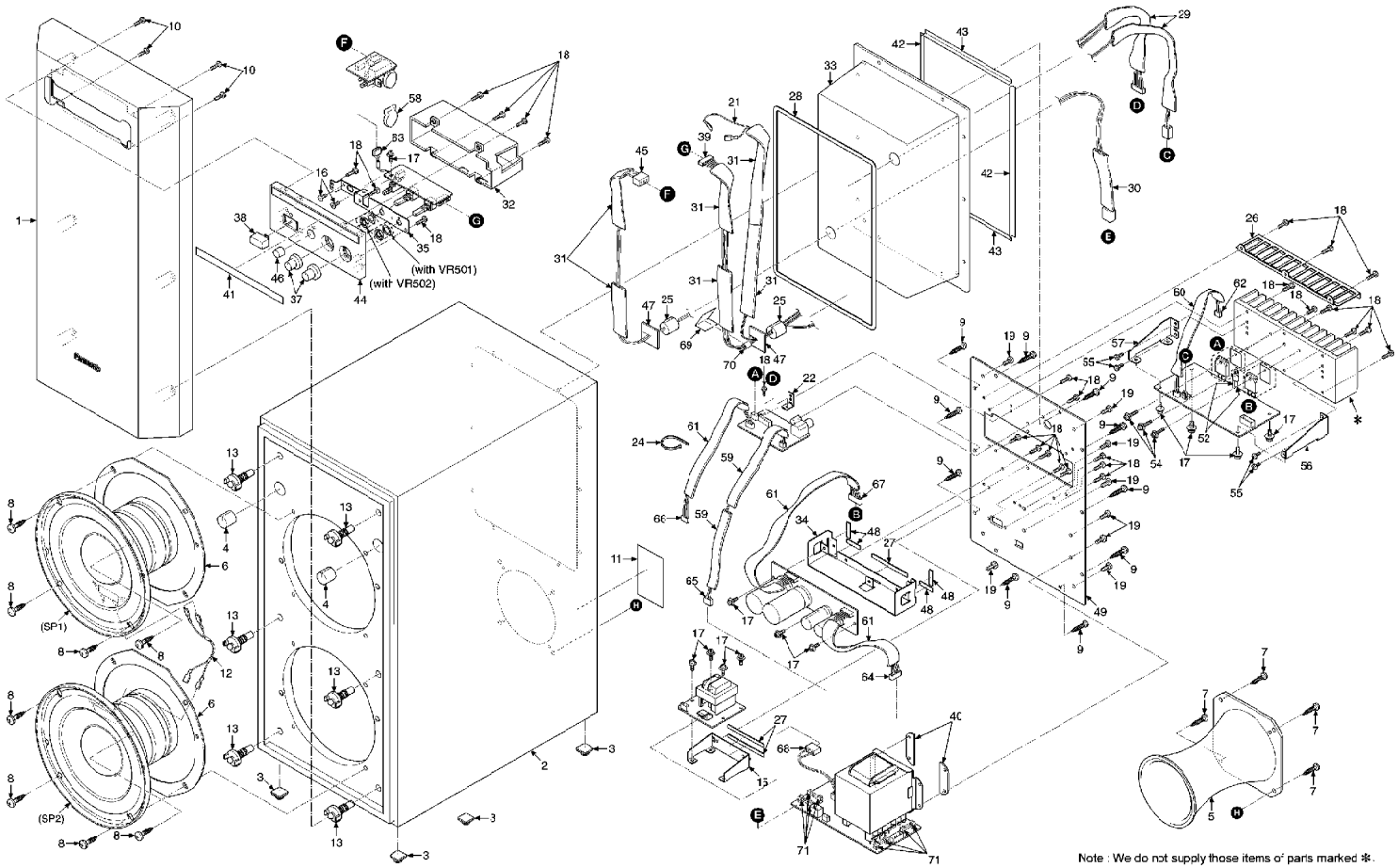
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	RYB0282	SPEAKER NET ASS'Y	1	(MAES)(S)
1	RYB0282A	SPEAKER NET ASS'Y	1	(MAES)(K)
2	RYK1166-S	CABINET ASS'Y	1	(MAES)(S)
2	RYK1166-K	CABINET ASS'Y	1	(MAES)(K)
3	RKA0072-KA	FOOT	4	(MAES)
4	SHGS8G9071	CORD BUSHING	2	(MAES)
5	RKT0084-K	BASS-REFLEX	1	(MAES)
6	RMQ0705	PACKING,WOOFER	2	(MAES)
7	XTN42+20FG	SCREW	4	(MAES)
8	XTN42+20	SCREW	8	(MAES)
9	XTN42+25FG	SCREW	10	(MAES)
10	XTV32+11J	SCREW	4	(MAES)
11	RGN2191-K	SPEC SHEET	1	(MAES)(EB)
11	RGN2190-K	SPEC SHEET	1	(MAES)(EG)
11	RGN2192-K	SPEC SHEET	1	(MAES)(GC)
11	RGN2193-K	SPEC SHEET	1	(MAES)(GN)
12	REZ1293B	SPEAKER WIRE ASS'Y	1	(MAES)
13	RKQP0252-1	NET CATCH PIN	6	(MAES)
15	RMNZWA50EG-3	BRACKET,TRANS	1	(MAES)
16	XSB3+6	SCREW	2	(MAES)
17	XTN3+8J	SCREW	12	(MAES)
18	XTB3+10GFZ	SCREW	27	(MAES)
19	XTB4+10GFZ	SCREW	8	(MAES)
21	REXZWA110-1	CORD ASS'Y(SP)	1	(MAES)
22	RMNZWA110-1	BRACKET,PCB	1	(MAES)
24	RMR0896-C	BINDER	1	(MAES)
25	SHRS9071	BUSHING	2	(MAES)
26	RGQZWA50EG-1	BRACKET,HEATSINK	1	(MAES)
27	RMQZWA110-1	CUSHION	3	(MAES)
28	RMQZWA50EG-2	GASKET	1	(MAES)
29	RMQZWA50EG-5	CUSHION	2	(MAES)
30	RMQZWA50EG-6	CUSHION	1	(MAES)
31	RMQZWA50EG-7	CUSHION	6	(MAES)
32	RKSZWA110-1	MOLD FRONT CASE	1	(MAES)
33	RKSZWA110-2	MOLD CASE	1	(MAES)
34	RMNZWA110-2	BRACKET,PCB	1	(MAES)
35	RMNZWA110-3	BRACKET,POWER SW	1	(MAES)
37	RGWZWA110-1	KNOB,LPF/VOL.	2	(MAES)(K)
37	RGWZWA110EG1	KNOB,LPF/VOL.	2	(MAES)(S)
38	RGUZWA110-1	BUTTON,POWER	1	(MAES)(K)
38	RGUZWA110EG1	BUTTON,POWER	1	(MAES)(S)
39	REXZWA110EG2	CORD ASS'Y	1	(MAES)
40	RMQZWA110-2	CUSHION,TRANS	2	(MAES)
41	RGKZWA110-1	LABEL	1	(MAES)
42	RMQZWA110-3	CUSHION	2	(MAES)
43	RMQZWA110-4	CUSHION	2	(MAES)
44	RGPZWA110-1	MOLD FRONT PANEL	1	(MAES)(K)
44	RGPZWA110EG1	MOLD FRONT PANEL	1	(MAES)(S)
45	REXZWA110-3	CORD ASS'Y	1	(MAES)
46	RGUZWA110-2	BUTTON,PHASE	1	(MAES)(K)
46	RGUZWA110EG2	BUTTON,PHASE	1	(MAES)(S)
47	RMQZWA110-5	GASKET	2	(MAES)
48	RMQZWA110-6	CUSHION	4	(MAES)
49	RGGZWA110EG1	REAR PANEL	1	(MAES)
52	RWZZWA110-1	TUBE	2	(MAES)
54	XYN3+F12FZ	SCREW	3	(MAES)
55	XTB3+8GFZ	SCREW	4	(MAES)
56	RMNZWA50EG-1	BRACKET,PCB	1	(MAES)
57	RMNZWA50EG-2	BRACKET,PCB	1	(MAES)
58	RMRZWA50EG-3	CAP,CAPACITOR(C852)	1	(MAES)
59	RMQZWA50EG-5	CUSHION	2	(MAES)
60	RMQZWA50EG-6	CUSHION	1	(MAES)
61	RMQZWA50EG-7	CUSHION	3	(MAES)
62	REXZWA110-4	CORD ASS'Y(PJ501)	1	(MAES)
63	REXZWA50EG-5	CORD ASS'Y(PJ507)	1	(MAES)
64	REXZWA110-5	CORD ASS'Y(PJ802)	1	(MAES)
65	REXZWA110-6	CORD ASS'Y(PJ803)	1	(MAES)
66	REXZWA110-7	CORD ASS'Y(PJ804)	1	(MAES)
67	REXZWA110-8	CORD ASS'Y(PJ805)	1	(MAES)
68	REXZWA50EG-8	CORD ASS'Y(PJ853)	1	(MAES)
69	RMQZWA110EG7	CUSHION	1	(MAES)
70	RLQZWA110EG1	FERRITE CORE	1	(MAES)
71	EYF52BC	FUSE HOLDER	8	(MAES)
A1	RQT6392-B	O/I BOOK	1	(MAES) (EB,GN)<IA>
A1	RQT6174-E	O/I BOOK	1	(MAES) (EG) <IB>
A1	RQT6175-G	O/I BOOK	1	(MAES) (GC) <IC>
A2	RJA0044-3C	AC MAINS LEAD	1	(MAES)(EB)
A2	RJA0043-1C	AC MAINS LEAD	1	(MAES)(EG,GC)
A2	RJA0035-C	AC MAINS LEAD	1	(MAES)(GN)
A3	RJL1P015B50	MONAURAL CONNECTION CABLE	1	(MAES)
A4	SJP5213-2	POWER PLUG ADAPTOR	1	K2DR42E00003 (MAES)(GC)
A5	RQCB0169	SERVICE SHOP LIST	1	(MAES)
C501	ECEA1HKA010B	50V 1U	1	(MAES)
C502-04	ECKR1H221KB5	50V 220P	3	(MAES)
C505,06	ECEA1VKA100B	35V 10U	2	(MAES)
C507,08	ECQB1H473JF3	50V 0.047U	2	(MAES)
C509	ECQV1H334JL3	50V 0.33U	1	(MAES)
C510	ECQV1H184JL3	50V 0.18U	1	(MAES)
C511	ECEA1EKA220B	25V 22U	1	(MAES)
C512	ECA1CKA220B	16V 22U	1	(MAES)
C514,15	ECEA1VKA100B	35V 10U	2	(MAES)
C516,17	ECKR1H103ZF5	50V 0.01U	2	F1B1H1030001 (MAES)
C521-23	ECEA1VKA100B	35V 10U	3	(MAES)
C524	ECKR1H101KB5	50V 100P	1	(MAES)
C525	ECKR1H102KB5	50V 1000P	1	(MAES)
C526-29	ECKR1H103ZF5	50V 0.01U	4	F1B1H1030001 (MAES)
C530	ECKR1H101KB5	50V 100P	1	(MAES)
C601	ECEA1HKA4R7B	50V 4.7U	1	(MAES)
C602	ECQV1H124JM3	50V 0.12U	1	(MAES)
C603	ECKR1H222KB5	50V 2200P	1	(MAES)
C604	RCKZWA110-1	500V 100P	1	(MAES)
C605	ECKR1H102KB5	50V 1000P	1	(MAES)
C606	RCKZW50EG-1	500V 4P	1	(MAES)
C607	ECKR1H101KB5	50V 100P	1	(MAES)

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C608	ECEA1AKA470B	10V 47U	1	(MAES)
C609,10	RCKZWA110 1	500V 100P	2	(MAES)
C613,14	ECKR1H103ZF5	50V 0.01U	2	F1B1H1030001 (MAES)
C615	ECEA0JKA101B	6.3V 100U	1	(MAES)
C616	ECEA1EKA4R7B	25V 4.7U	1	(MAES)
C617	ECEA1EKA220B	25V 22U	1	(MAES)
C618	ECKR1H332MD5	50V 3300P	1	(MAES)
C619	ECQB1H473JF3	50V 0.047U	1	(MAES)
C620-22	ECKR1H103ZF5	50V 0.01U	3	F1B1H1030001 (MAES)
C801,02	RCEZWA110EG1	63V 6800U	2	(MAES)
C803,04	ECA1EM221B	25V 220U	2	(MAES)
C805-08	ECEA1VKA100B	35V 10U	4	(MAES)
C809,10	RCEZWA110-2	35V 3300U	2	(MAES)
C812,13	ECQV2A473JMT	100V 0.047U	2	(MAES)
C814,15	ECQB1H473JF3	50V 0.047U	2	(MAES)
C851,52	RCKZWA50EG-1	0.01U	2	(MAES) ⚠
CP501	RJSZWA50EG-5	CONNECTOR(2P) (P501)	1	(MAES)
CP502	RJSWA110-1	CONNECTOR(6P) (P502)	1	(MAES)
CP503	RJSWA110-2	CONNECTOR(6P) (P503)	1	(MAES)
CP507	RJSZWA50EG-2	CONNECTOR(3P) (P507)	1	(MAES)
CP602	RJSZWA50EG-4	CONNECTOR(2P) (P602)	1	(MAES)
CP801	SJS9236-1	SOKET,AC INLET(P801)	1	K2AA2B000002 (MAES) ⚠
CP802	RJSWA110-3	CONNECTOR(5P) (P802)	1	(MAES)
CP803	RJSZWA50EG-5	CONNECTOR(2P) (P803)	1	(MAES)
CP804	RJSZWA50EG-2	CONNECTOR(3P) (P804)	1	(MAES)
CP805	RJSWA110-4	CONNECTOR(6P) (P805)	1	(MAES)
CP851	RJSZWA50EG-6	CONNECTOR(2P) (P851)	1	(MAES)
CP852	RJSZWA50EG-7	CONNECTOR(2P) (P852)	1	(MAES)
CP853	RJSZWA50EG-6	CONNECTOR(2P) (P853)	1	(MAES)
D501-04	MA167TA	DIODE	4	MA2C167 (MAES)
D507,08	MA167TA	DIODE	2	MA2C167 (MAES)
D512	SPR-39MVW	LED	1	(MAES)
D601,02	MA167TA	DIODE	2	MA2C167 (MAES)
D603,04	MTZJ5R6BTA	DIODE	2	(MAES)
D605,06	MTZJ10BTA	DIODE	2	(MAES)
D607-09	MA167TA	DIODE	3	MA2C167 (MAES)
D801,02	RL153	DIODE	2	(MAES)
D803-06	1SR139-200TA	DIODE	4	(MAES)
D807-10	1N5402BF	DIODE	4	(MAES) ⚠
D811-14	RL153	DIODE	4	(MAES)
D815,16	MTZJ13BTA	DIODE	2	(MAES)
D817,18	MTZJ15BTA	DIODE	2	(MAES)
D819	MA167TA	DIODE	1	MA2C167 (MAES)
F1	XBA2C20TB0S	FUSE,T2A	1	(MAES) ⚠
F2	XBA2C10TB0S	FUSE,T1A	1	K5D102BL0004 (MAES) ⚠
F3,F4	XBA2C31TB0S	FUSE,T3.15A	2	(MAES) ⚠
IC501-03	BA4558	IC	3	(MAES)
IC504	NJM4558D-D	IC	1	(MAES)
IC602	UPC1237HA	IC	1	(MAES)
IC603	BA4558	IC	1	(MAES)

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
JK501	RJJZWA50EG-1	JK,INPUT	1	(MAES)
L601	RLQZWA50EG-1	COIL	1	(MAES)
FIL801	RLCZWA50EG-1	COIL	1	(MAES) ⚠
P1	RPG6125	PACKING CASE	1	(MAES)(EB)(K)
P1	RPG6124	PACKING CASE	1	(MAES)(EB)(S)
P1	RPG6030	PACKING CASE	1	(MAES)(EG)(K)
P1	RPG6029	PACKING CASE	1	(MAES)(EG)(S)
P1	RPG6031-GCS	PACKING CASE	1	(MAES)(GC)(S)
P1	RPG6031-GNS	PACKING CASE	1	(MAES)(GN)(S)
P2	RPNP1333	CUSHION	1	(MAES)
P3	SPHP35060	PROTECTION SHEET	1	(MAES)
P4	XZBA4	PROTECTION BAG	1	(MAES)
Q501,02	2SC2785FETA	TRANSISTOR	2	(MAES)
Q503	DTC124ESTP	TRANSISTOR	1	(MAES)
Q504	2SA1175KEF	TRANSISTOR	1	(MAES)
Q505,06	DTA124ESTP	TRANSISTOR	2	B1GCCFLL0003 (MAES)
Q507	DTC124EST	TRANSISTOR	1	(MAES)
Q601,02	2SA1174KEF	TRANSISTOR	2	(MAES)
Q603	2SA1175KEF	TRANSISTOR	1	(MAES)
Q604,05	2SC2785FETA	TRANSISTOR	2	(MAES)
Q606	2SA1145-OY	TRANSISTOR	1	(MAES)
Q607	2SC1815BGL	TRANSISTOR	1	(MAES)
Q608	2SC2705-OY	TRANSISTOR	1	(MAES)
Q609	2SC2235	TRANSISTOR	1	(MAES)
Q610	2SA965	TRANSISTOR	1	(MAES)
Q611	2SC4468	TRANSISTOR	1	B1BAGL000025 (MAES)
Q612	2SA1695	TRANSISTOR	1	(MAES)
Q613,14	2SC2784FETA	TRANSISTOR	2	B1AAAL000002 (MAES)
Q615	2SA1174KEF	TRANSISTOR	1	(MAES)
Q616	2SJ329	TRANSISTOR	1	(MAES)
Q617	2SK2724	TRANSISTOR	1	(MAES)
Q618	2SA1174KEF	TRANSISTOR	1	(MAES)
Q803	2SC1815BGL	TRANSISTOR	1	(MAES)
Q804	2SA1015Y	TRANSISTOR	1	(MAES)
R501	ERDS2TJ222T	1/4W 2.2K	1	(MAES)
R502	ERDS2TJ104T	1/4W 100K	1	(MAES)
R503	ERDS2TJ473T	1/4W 47K	1	(MAES)
R504	ERDS2TJ182T	1/4W 1.8K	1	(MAES)
R505	ERDS2TJ472T	1/4W 4.7K	1	(MAES)
R506-08	ERDS2TJ103T	1/4W 10K	3	(MAES)
R509	ERDS2TJ273T	1/4W 27K	1	(MAES)
R510	ERDS2TJ224T	1/4W 220K	1	(MAES)
R511,12	ERDS2TJ272T	1/4W 2.7K	2	(MAES)
R513	ERDS2TJ103T	1/4W 10K	1	(MAES)
R514	ERDS2TJ102T	1/4W 1K	1	(MAES)
R515	ERDS2TJ474T	1/4W 470K	1	(MAES)
R516	ERDS2TJ105T	1/4W 1M	1	(MAES)
R517	ERDS2TJ224T	1/4W 220K	1	(MAES)
R518,19	ERDS2TJ104T	1/4W 100K	2	(MAES)
R520,21	ERDS2TJ103T	1/4W 10K	2	(MAES)
R522	ERDS2TJ474T	1/4W 470K	1	(MAES)
R523,24	ERDS2TJ101T	1/4W 100	2	(MAES)
R525	ERDS2TJ223T	1/4W 22K	1	(MAES)
R526	ERDS2TJ103T	1/4W 10K	1	(MAES)
R527	ERDS2TJ105T	1/4W 1M	1	(MAES)
R528	ERDS2TJ103T	1/4W 10K	1	(MAES)
R529	ERDS2TJ223T	1/4W 22K	1	(MAES)
R530	ERDS2TJ103T	1/4W 10K	1	(MAES)
R531	ERDS2TJ102T	1/4W 1K	1	(MAES)
R532	ERDS2TJ105T	1/4W 1M	1	(MAES)
R533	ERDS2TJ102T	1/4W 1K	1	(MAES)
R534	ERDS2TJ103T	1/4W 10K	1	(MAES)
R535	ERDS2TJ683T	1/4W 68K	1	(MAES)
R536	ERDS2TJ103T	1/4W 10K	1	(MAES)
R537	ERDS2TJ0R0T	1/4W 0	1	(MAES)
R547-49	ERDS2TJ222T	1/4W 2.2K	3	(MAES)

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R601	ERDS2TJ472T	1/4W 4.7K	1	(MAES)
R602	ERDS2TJ473T	1/4W 47K	1	(MAES)
R603	ERDS2TJ331T	1/4W 330	1	(MAES)
R604	ERDS2TJ103T	1/4W 10K	1	(MAES)
R605	ERDS2TJ181T	1/4W 180	1	(MAES)
R606,07	ERD25FVJ181T	180	2	(MAES) ⚠
R608	ERDS2TJ153T	1/4W 15K	1	(MAES)
R609	ERDS2TJ681T	1/4W 680	1	(MAES)
R610	ERDS2TJ473T	1/4W 47K	1	(MAES)
R611	ERD25FVJ151T	150	1	(MAES) ⚠
R612	ERDS2TJ272T	1/4W 2.7K	1	(MAES)
R613	ERDS2TJ102T	1/4W 1K	1	(MAES)
R614	ERDS2TJ151T	1/4W 150	1	(MAES)
R615	ERD25FVJ470T	47	1	(MAES) ⚠
R616,17	ERD25FVJ151T	1/4W 150	2	(MAES)
R619,20	ERD25FVJ100T	10	2	(MAES) ⚠
R621,22	ERX3ANJPR22	3W 0.22	2	(MAES)
R623,24	ERD25FVJ100T	10	2	(MAES) ⚠
R625	ERDS2TJ392T	1/4W 3.9K	1	(MAES)
R626	ERDS2TJ103T	1/4W 10K	1	(MAES)
R627	ERDS2TJ471T	1/4W 470	1	(MAES)
R628	ERDS2TJ333T	1/4W 33K	1	(MAES)
R629	ERDS2TJ103T	1/4W 10K	1	(MAES)
R630	ERDS2TJ104T	1/4W 100K	1	(MAES)
R631	ERDS2TJ103T	1/4W 10K	1	(MAES)
R632	ERDS2TJ563T	1/4W 56K	1	(MAES)
R633	ERDS2TJ103T	1/4W 10K	1	(MAES)
R634	ERD2STJ562	1/4W 5.6K	1	(MAES)
R635,36	ERDS2TJ103T	1/4W 10K	2	(MAES)
R637,38	ERDS2TJ332T	1/4W 3.3K	2	(MAES)
R639,40	ERDS2TJ473T	1/4W 47K	2	(MAES)
R642,43	ERDS2TJ105T	1/4W 1M	2	(MAES)
R644-47	ERDS2TJ103T	1/4W 10K	4	(MAES)
R648,49	ERDS2TJ472T	1/4W 4.7K	2	(MAES)
R650	ERDS2TJ153T	1/4W 15K	1	(MAES)
R651	ERD25FVJ470T	1/4W 47	1	(MAES)
R652,53	ERD25FVJ100T	1/4W 10	2	(MAES)
R654	ERDS2TJ103T	1/4W 10K	1	(MAES)
R801,02	ERDS1FVJ471P	1/2W 470	2	(MAES)
R803,04	ERDS2TJ332T	1/4W 3.3K	2	(MAES)
R805,06	ERDS2TJ103T	1/4W 10K	2	(MAES)
RLY601	RSYZWA50EG-1	RELAY	1	(MAES)
RLY801	RSYZWA50EG-2	RELAY	1	(MAES) ⚠
S501	RSBZWA110-1	SW,PHASE	1	(MAES)
S851	RSBZWA50EG-1	SW,POWER	1	(MAES) ⚠
S852	RSSZWA50EG-2	SW,VOLTAGE SELECTOR	1	(MAES) ⚠
SP1	EAST17PL11A6	SPEAKER	2	(MAES)
T801	RTPZWA110EG1	POWER TRANSFORMER	1	(MAES) ⚠
T851	RTPZWA110EG2	POWER TRANSFORMER	1	(MAES) ⚠
TH801	RRSZWA110-1	THERMISTOR	1	(MAES)
VR501	RRVZWA110-1	VR,VOLUME	1	(MAES)
VR502	RRVZWA110-2	VR,LOW PASS FILTER	1	(MAES)
ZNR801	ERZV10V511CS	ZNR	1	(MAES) ⚠

10 Cabinet Parts Location



11 Packaging